

## FLUID INJECTOR AND INJECTION METHOD

### ABSTRACT OF THE DISCLOSURE

There are provided an injector and an associated method for injecting and mixing gases, comprising a carbonaceous fuel and oxygen, in a combustion chamber of a combustion device. The injector has jets, which can be used to separately inject different combustion fuels. The injector is compatible with combustion devices that  
5 inject only gases, for example, a reheater that provides initial combustion in a power generation cycle or a reheater that recombusts a discharged gas from a gas generator and turbine. Further, the injector defines an annular space through which a recycle gas can be injected into the combustion chamber to lower the combustion temperature.